What is claimed is:

1. A tape storage device which sequentially records data, comprising:

a recording section which records a data freshness degree on a tape recording medium, in association with new data to be newly recorded, the data freshness degree being information indicating how new the new data is with respect to already-recorded old data;

a determining section which determines whether or not a fault occurs in recording on the tape recording medium performed by the recording section;

a reading section which reads a faulty portion freshness degree when it is determined that the fault occurs, the faulty portion freshness degree being the data freshness degree of a faulty portion on the tape recording medium; and

a skip recording section which allows the recording section to record a data freshness degree higher than the faulty portion freshness degree, immediately before the faulty portion.

2. The tape storage device according to claim 1, wherein when it is determined that the data freshness degree recorded immediately before the faulty portion prior to occurrence of the fault is higher than the faulty portion freshness degree, the skip recording section retains the data freshness degree recorded immediately before the faulty portion prior to occurrence of the fault, without changing it.

3. The tape storage device according to claim 1, wherein the skip recording section continuously records data and data freshness degrees in portions subsequent to the faulty portion on the tape recording medium, using a data freshness degree that is equal to or higher than the data freshness degree just recorded immediately before the faulty portion.

4. The tape storage device according to claim 1,

wherein when the data is the last of data to be sequentially recorded by the recording section, the reading section reads the data freshness degree of a predetermined area ahead of a location where the last data is to be recorded on the tape recording medium, and

the skip recording section allows the recording section to record a data freshness degree higher than the data freshness degree of the predetermined area, in association with the data.

5. The tape storage device according to claim 1, further comprising:

an acquiring section which acquires a written data freshness degree from the tape recording medium, the written data freshness degree being a data freshness degree for use in recording on the tape recording medium; and

a written freshness degree determining section which determines whether or not the written data freshness degree is erroneous,

wherein in a case where it is determined that the written

data freshness degree is erroneous,

the reading section reads the faulty portion freshness degree, which is the data freshness degree of a faulty portion in recording on the tape recording medium, when it is determined that the fault occurs, and

the skip recording section allows the recording section to record a data freshness degree higher than the faulty portion freshness degree, immediately before the faulty portion.

6. **(Amended)** A tape storage device which sequentially records data, comprising:

a recording section which records a data freshness degree on a tape recording medium, in association with new data to be newly recorded, the data freshness degree being information indicating how new the new data is with respect to already-recorded old data;

a determining section which determines whether or not a fault occurs in recording on the tape recording medium performed by the recording section; and

a skip recording section which allows the recording section to record a value when it is determined that the fault occurs, the value indicating that a faulty portion on the tape recording medium retains old invalid data;

wherein the skip recording section records a data freshness degree lower than the data freshness degree recorded immediately before the faulty portion, in the faulty portion.

7. **(Cancelled)**

8. The tape storage device according to claim 6, further comprising a reading section which reads a faulty portion freshness degree when it is determined that the fault occurs, the faulty portion freshness degree being the data freshness degree of the faulty portion,

wherein, based on the faulty portion freshness degree, the skip recording section allows the recording section to record a data freshness degree indicating that the data will be overwritten except the faulty portion.

9. **(Amended)** The tape storage device according to any one of claims 1 to 6 or 8, wherein the tape storage device is a tape drive based on the LTO (Trademark) specifications, and the tape recording medium is a tape recording medium based on the LTO specifications.

10. A control unit for controlling a tape drive unit including a recording section which sequentially records a data freshness degree on a tape recording medium, in association with new data to be newly recorded, and a reading section which reads a data freshness degree, the data freshness degree being information indicating how new the new data is with respect to already-recorded old data, the control unit comprising:

a determining section which determines whether or not a fault occurs in recording on the tape recording medium performed by the recording section, and which allows the reading section to read

a faulty portion freshness degree when it is determined that the fault occurs, the faulty portion freshness degree being the data freshness degree of a faulty portion on the tape recording medium; and

a skip recording section which allows the recording section to record a data freshness degree higher than the faulty portion freshness degree, immediately before the faulty portion.

11. **(Cancelled)**

12. A control method of controlling a tape storage device which sequentially records data, the method comprising the steps of:

allowing a data freshness degree to be recorded on a tape recording medium, in association with new data to be newly recorded, the data freshness degree being information indicating how new the new data is with respect to already-recorded old data;

determining whether or not a fault occurs in recording on the tape recording medium;

allowing a faulty portion freshness degree to be read when it is determined that the fault occurs, the faulty portion freshness degree being the data freshness degree of a faulty portion on the tape recording medium; and

allowing a data freshness degree higher than the faulty portion freshness degree to be recorded immediately before the faulty portion.

13. **(Cancelled)**

14. **(Amended)** The control method according to claim 12,

wherein the tape storage device is a tape drive based on the LTO specifications, and the tape recording medium is a tape recording medium based on the LTO specifications.

15. A program for controlling a tape storage device by using a computer, the tape storage device sequentially recording data, the program allowing the computer to realize:

a function of recording a data freshness degree on a tape recording medium, in association with new data to be newly recorded, the data freshness degree being information indicating how new the new data is with respect to already-recorded old data;

a function of determining whether or not a fault occurs in recording on the tape recording medium;

a function of reading a faulty portion freshness degree when it is determined that the fault occurs, the faulty portion freshness degree being the data freshness degree of a faulty portion on the tape recording medium; and

a function of recording a data freshness degree higher than the faulty portion freshness degree, immediately before the faulty portion.

16. **(Cancelled)**

17. **(Amended)** The program according to claim 15, wherein the tape storage device is a tape drive based on the LTO specifications, and the tape recording medium is a tape recording medium based on the LTO specifications.

18. A recording medium storing a program for controlling a tape

storage device by using a computer, the tape storage device sequentially recording data, the program allowing the computer to realize:

a function of recording a data freshness degree on a tape recording medium, in association with new data to be newly recorded, the data freshness degree being information indicating how new the new data is with respect to already-recorded old data;

a function of determining whether or not a fault occurs in recording on the tape recording medium;

a function of reading a faulty portion freshness degree when it is determined that the fault occurs, the faulty portion freshness degree being the data freshness degree of a faulty portion on the tape recording medium; and

a function of recording a data freshness degree higher than the faulty portion freshness degree, immediately before the faulty portion.

19. **(Cancelled)**

20. **(Amended)** The recording medium according to claim 18, wherein the tape storage device is a tape drive based on the LTO specifications, and the tape recording medium is a tape recording medium based on the LTO specifications.